ABSTRACT OF THE DISCLOSURE

An optical transmission system having a supervisory system of devices disposed along an optical link. Co-propagating Raman amplifiers are disposed along the optical link. Low frequency supervisory signals are superimposed on the optical signals traveling on the optical link by suitable modulators in the devices disposed along the line or by the same co-propagating Raman amplifiers. Regeneration of the supervisory signal is provided in at least one device disposed along the optical link in order to counteract attenuation introduced on the supervisory signal by the co-propagating Raman amplifiers.